

Claims:

1. A method for setting transactional behavior for a CORBA method, the method comprising:

a system remote from a client creating a transaction policy by translating a deployment

5 descriptor file;

the client calling a CORBA method, wherein the client resides on a system local to the client, wherein the CORBA method resides on the system remote from the client, and wherein the call comprises an IIOP message wherein the IIOP message includes a method name for the CORBA method called;

10 an interceptor residing on the system remote from the client intercepting the IIOP message;

the interceptor residing on the system remote from the client reading the method name from the IIOP message;

15 the interceptor residing on the system remote from the client checking the transaction policy for the system remote from the client with respect to the method name;

the interceptor residing on the system remote from the client either invoking the called CORBA method directly or first completing a control object interpositioning process and then invoking the called CORBA method where the choice is defined by the results of the check of the transaction policy with respect to the method name.

09772548-013001
TOEFO-8452760

2. A method for setting transactional behavior for a CORBA method, the method comprising:

a system remote from a client creating a transaction policy by translating a deployment descriptor file during deployment of the system;

5 the client calling a CORBA method, wherein the client resides on a system local to the client, wherein the CORBA method resides on the system remote from the client, wherein the call comprises an IIOP message having a service context, and wherein the IIOP message includes a method name for the CORBA method called;

10 an interceptor intercepting the IIOP message, wherein the interceptor resides on the system local to the client;

the interceptor residing on the system local to the client inserting an object representing the transaction context on the service context of the IIOP message;

the interceptor residing on the system local to the client returning the IIOP message to its original path;

15 an interceptor residing on the system remote from the client intercepting the IIOP message;

the interceptor residing on the system remote from the client extracting the object representing the transaction context from the service context of the IIOP message and reading the method name from the IIOP message;

20 the interceptor residing on the system remote from the client checking the transaction policy for the system remote from the client with respect to the method name;

the interceptor residing on the system remote from the client either invoking the called CORBA method directly or first completing a control object interpositioning process between the object representing the transaction context and an OTS spanning both the system local to the client and the system remote from the client and then invoking the called CORBA method where

5 the choice is defined by the results of the check of the transaction policy with respect to the method name.

3. The method of claim 1, wherein the transaction policy created on the system remote from the client is created during deployment of the system remote from the client.

4. The method of claim 1, wherein the transaction policy created on the system remote from the client is created after receipt of the IIOP message to facilitate run-time comparison of the

10 method name with the deployment descriptor file.

5. A method for changing transactional behavior for a CORBA method resident on a server;
the method comprising:

defining transactional behavior for a CORBA method resident on a server in a transaction
policy implemented on the server, wherein the transaction policy is translated from a deployment
5 descriptor file during deployment of the server, and wherein invocations of the CORBA method
from client objects result in a defined transactional behavior based on the transaction policy;

modifying the deployment descriptor file to change the transactional behavior for the
CORBA method on the server;

redeploying the server which implements a modified transaction policy translated from
10 the modified deployment descriptor file wherein identical invocations from identical client
objects result in a different defined transactional behavior for the CORBA method on the server
based on the modified transaction policy.

6. The method of claim 5, wherein the deployment descriptor file and the transaction policy
translated from the deployment descriptor file define transactional behavior for more than one
15 CORBA method resident on the server.

7. The method of claim 6, wherein the deployment descriptor file and the transaction policy
translated from the deployment descriptor file define transactional behavior for all CORBA
methods resident on the server.

8. The method of claim 6 wherein the deployment descriptor file is a text file and wherein
20 the transaction policy is a table translated from the text file.

9. The method of claim 6, wherein the deployment descriptor file is stored on the server.

10. The method of claim 6 wherein the deployment descriptor file is stored in a location remote from the server.

11. The method of claim 10 wherein the deployment descriptor file is translated by a plurality of servers to create the transaction policies for the plurality of servers.

5

TOOETD" 84522760

12. A method for propagating transactional context for a CORBA transaction, the method comprising:

a client calling a CORBA method, wherein the client resides on a system local to the client, wherein the CORBA method resides on a system remote from the client, wherein the call

5 comprises an IIOP message having a service context;

an interceptor intercepting the IIOP message, wherein the interceptor resides on the system local to the client;

the interceptor residing on the system local to the client inserting an object representing the transaction context on the service context of the IIOP message;

10 the interceptor residing on the system local to the client returning the IIOP message to its original path;

an interceptor residing on the system remote from the client intercepting the IIOP message;

15 the interceptor residing on the system remote from the client extracting the object representing the transaction context from the service context of the IIOP message.

13. The method of claim 12, further comprising:

the interceptor residing on the system remote from the client completing a control object interpositioning process between the object representing the transaction context and an OTS spanning both the system local to the client and the system remote from the client and then

20 invoking the called CORBA method.